

Title (en)
Infrared-blocking optical filter

Title (de)
Infrarot blockierendes optisches Filter

Title (fr)
Filtre optique bloquant l'infrarouge

Publication
EP 0687923 A2 19951220 (EN)

Application
EP 95109253 A 19950614

Priority
JP 15640894 A 19940616

Abstract (en)
Disclosed herein is an infrared-blocking optical filter having optical properties that the transmittance to rays in a visible region is excellent while rays in a near infrared region, particularly, in a wavelength range longer than 1200 nm are cut off or attenuated with high efficiency. The infrared-blocking optical filter includes a transparent substrate and either of the following infrared-blocking films (A) and (B) provided on a surface of the transparent substrate. Film (A): an infrared-blocking film formed of a synthetic resin in which fine powder of a metal oxide material composed of indium oxide and/or tin oxide is dispersed; and Film (B): an infrared-blocking film formed of a deposit of a metal oxide material composed of indium oxide and/or tin oxide. The infrared-blocking film may be formed on a transparent support member to constitute an infrared-blocking composite film which is provided on a surface of the transparent substrate to form an infrared-blocking optical filter.

IPC 1-7
G02B 5/22

IPC 8 full level
G02B 5/20 (2006.01)

CPC (source: EP US)
G02B 5/208 (2013.01 - EP US)

Citation (applicant)
JP 8252793 A 19930318

Cited by
US7169834B2; US7074351B2; US6097031A; EP1111410A3; US7196790B2; US7531363B2; US6542292B2; WO0159003A1; WO2005005140A1; WO9905723A1

Designated contracting state (EPC)
CH DE FR GB IT LI

DOCDB simple family (publication)
EP 0687923 A2 19951220; EP 0687923 A3 19960717; US 5691838 A 19971125

DOCDB simple family (application)
EP 95109253 A 19950614; US 46754595 A 19950606